# HOMONOTUS SANGUINOLENTUS (FAB.) (HYMENOPTERA: POMPILIDAE): SOME RECENT RECORDS AND OBSERVATIONS FROM THE NEW FOREST, HAMPSHIRE

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### ABSTRACT

A number of recent records of the Red Data Book 1 spider-hunting wasp *Homonotus sanguinolentus* are reported. An observation of a female apparently searching for the host spider in the New Forest, Hampshire is also described.

## Introduction

The spider-hunting wasp *Homonotus sanguinolentus* (Fabricius) has always been regarded as something of a rarity in Britain (Day, 1988; Falk, 1991). It is currently included on the Biodiversity Action Plan Priority list and is classified as Red Data Book I (Endangered) (Anon, 1995). It is known from a few records in southern England, largely centred on the New Forest, Hampshire and the Purbeck heathlands in Dorset.

The host spider has been identified as the clubionid *Cheiracantheum erraticum* Walkenaer (Edwards, 1997). One of the most recent New Forest records was of a single male captured on dry heathland by G.R. Else on the southern end of the Cranesmoor valley mire complex (SU1902), on the western side of the New Forest near Burley in 1990. After this record, there appear to have been no more until a series of my own records since 1999.

#### RECENT NEW FOREST RECORDS

Here I outline these recent records gathered between 1999 and 2002, and an observation of a female apparently hunting for its host, during 2004.

On 4 August 1999 I was visiting Markway Inclosure and Duckhole Bog approximately 2 km west of Brockenhurst (SU2502) in the New Forest when I came across the web refuge of the spider *C. erraticum* clustered in the top of a dead purple-moor grass *Molinia caerulea* seed head. Out of curiosity, I opened the web to discover an off-white coloured cocoon and a few remains of the original arachnid occupant within. This was collected and kept in a sheltered location out of doors over the winter.

On 19 June 2000 an all black-coloured female *H. sanguinolentus* emerged from the cocoon. Day (1988) notes that the females usually have a 'reddish thorax', but this is something that appears to have rarely been seen in British specimens.

On 11 August 2000, with a better understanding of how to find the web refuges of the host spider, a visit was made to the Vales Moor area (SU1904) approximately 1 km to the west of Burley village. *Cheiracantheum* refuge webs were easily found in the tops of dead flower spikes and occasionally within the folded leaves of purplemoor grass. A number of web refuges were also found in the seed heads of common cotton sedge *Eriophorium angustifolium* and a smaller number of web refuges were found in the flowerheads of cross-leaved heath *Erica tetralix*. Many of the webs were found to contain either well grown hymenopterous larvae which may have been the

larvae of *H. sanguinolentus*, or cocoons; some simply contained adult female spiders or clusters of spiderlings. On the nearby Kingston Great Common National Nature Reserve (NNR) (SU1802), a web containing a cocoon was found, and collected. On 28 June 2001 an all black male *H. sanguinolentus* emerged.

On 26 March 2002, whilst surveying invertebrates on Kingston Great Common NNR for the English Nature Hampshire team, I discovered a *C. erraticum* web, complete with grey coloured cocoon, amongst cross-leaved heath seed heads. This was collected and kept indoors on a cool window sill. On 23 May 2002, another all-black female *H. sanguinolentus* emerged. This specimen has been deposited in the collections of Hampshire County Museums and Archives Service, housed at Chilcomb House, Winchester.

#### AN OBSERVATION OF A HOST-SEARCHING FEMALE

On 30 July 2004, while visiting Shatterford Bog (SU3405) in the south of the New Forest near Beaulieu, I was alerted by a predominantly black spider-hunting wasp frantically moving through the stems of bog myrtle *Myrica gale* on the edge of a wet flush. I was able to watch this specimen searching meticulously each individual leaf and leaf node of the myrtle bush for some minutes. It appeared as though a very thorough search was being made for the web refugia of *C. erraticum*. The wasp was then seen to fly lower down amongst the wetland vegetation, including cross-leaved heath, common cotton sedge and purple-moor grass. All the while this specimen was searching by means of crawling and walking rapidly with slightly jerking movements across the vegetation, every inch of leaf stem and flower head was covered before moving to the next stem or flower head. On netting and examining the specimen fully I was able to confirm that it was a female *H. sanguinolentus*, this time, with a deep blood-red coloured thorax. On release she flew off rapidly towards a stand of common cotton sedge some distance away in the nearby wet flush. No further sightings were made during the course of prolonged observations at this site.

#### CONSERVATION IMPLICATIONS

These records and observations show that contrary to the habitat requirements described by Falk (1991), *H. sanguinolentus* is a species more closely associated with wet heath and valley mire and not open woodland in heathy districts or verge heathland. Such sites need to be free from heavy grazing pressure to allow the host spider to construct its web refugia in the uppermost parts of the vegetation. All of these records and sightings have been from areas with considerably lower grazing pressure than many parts of the New Forest.

#### REFERENCES

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